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EXAMINER

FEGGINS, KRISTAL J

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,623

Applicant(s)

AUBIN ET AL.

Examiner

K. Feggins

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-22 is/are allowed.
- 6) ☒ Claim(s) 1, 8, 9 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-7, 10, 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1, 8, 9 & 23 rejected under 35 U.S.C. 102(e) as being anticipated by Wood et al. (6,392,681 B1).

Wood et al. disclose the following claimed limitations:

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface, said printhead assembly including a plurality of printing elements (Abstract),

* a printhead support structure for supporting said printhead assembly(fig 1);

* means for securing said printhead assembly to said printhead support structure (col 28, lines 50-67, figs 2, 4, 5, 19A);

* means for adjusting angular orientation of said plurality of printing elements of said printhead assembly with respect to said worksurface (col 28, lines 50-67, figs 2, 4, 5, 19A).

* wherein said printhead support structure removably supports said printhead assembly (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface, said printhead assembly including a plurality of printing elements (Abstract, col 14, lines 51-67),

* a printhead support structure for removably supporting said printhead assembly (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a pin for removably securing said printhead assembly to said printhead support structure, said pin fitting through said printhead assembly and engaging said printhead support structure (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* at least one set screw engaging said pin for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface (col 13, lines 48-64, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* a printer having a printhead assembly for printing on a sheet material disposed on a worksurface (Abstract, fig 1)

* a printhead support structure for supporting said printhead assembly (Abstract, fig 1)

* means for securing said printhead assembly to said printhead support structure (col 13, lines 48-64, col 14, lines 51-67, col 28, lines 50-67, col 29, lines 1-5, figs 2, 4, 5, 19A);

* means for adjusting angular orientation of said printing elements of said printhead assembly with respect to said worksurface (col 28, lines 50-67, figs 2, 4, 5, 19A);

* means for adjusting skew of said printhead assembly with respect to an edge of said sheet material (col 27, lines 17-67, col 28, lines 1-3).

Response to Arguments

3. Applicant's arguments with respect to claims 1, 9, & 23 have been considered but are moot in view of the new ground(s) of rejection.

With regards to Applicant's argument that Wood et al. does not disclose a printer having a means for securing the printhead assembly to the printhead support structure and means for adjusting angular orientation of the printing elements with respect to the worksurface is acknowledged. However, Wood et al. does disclose a printer having a means for securing the printhead assembly to the printhead support structure and means for adjusting angular orientation of the printing elements with respect to the worksurface. Wood et al. disclose a single coupling joint that mounts the printhead assembly base, hence the printhead. The coupling joint is a trunnion pin, where the coupling joint allows the printhead to swivel for producing a more even pressure distribution to the thermal printing elements. Therefore, Wood et al. does disclose a

means for adjusting angular orientation of the plurality of printing elements with respect to the worksurface (col 13, lines 48-64, col 28, line 50-col 29, line 5, figs 2, 4, 5, 19A).

With regards to Applicant's argument that Wood et al. does not disclose a set screw that engages the pin to adjust angular orientation of the printing elements of the printhead assembly with respect to the worksurface is acknowledged. However, Wood et al. does disclose a single coupling joint that mounts the printhead assembly base. Wood et al. disclose a coupling joint that's a trunnion pin, where the coupling joint allows the printhead to swivel for producing a more even pressure distribution to the thermal printing elements. The printhead and its printing elements angular orientation is adjusted with respect to the worksurface each time the printhead swivels. Therefore, Wood et al. does disclose a printer having a means for securing the printhead assembly to the printhead support structure and means for adjusting angular orientation of the printing elements with respect to the worksurface and a set screw that engages the pin to adjust angular orientation of the printing elements of the printhead assembly with respect to the worksurface (also see the above rejection).

Allowable Subject Matter

4. Claims 11-13, 14-16, 20-22 are allowed.
5. Claim 2-7, 10, 18, 19, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: The primary reason for indicating allowable subject matter of claims 5 & 18-19

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is the inclusion of limitations of a printhead assembly that includes a pin that has a recessed portion for said at least one means for engaging to engage said recessed portion of said pin and a cam fits through a cam opening formed within the printhead assembly to allow the cam to cooperate with the pin such that when the cam is adjusted, the printhead assembly is moved relative to said edge of the sheet material for proper printing operation. It is these limitations found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The following is an examiner's statement of reasons for allowance: The primary reason for the allowance of claims 11-13 is the inclusion of the method steps for adjusting orientation of a removable printhead assembly that includes a adjusting position of the printhead assembly within the printhead supporting structure for a plurality of printing elements of the printhead assembly to be properly oriented with respect to a worksurface by adjusting means for adjusting orientation of the printing elements with respect to the worksurface wherein the means for adjusting is disposed within the printhead assembly. It is these method steps found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

The primary reason for the allowance of claims 14-16 is the inclusion of limitations of a printhead assembly that includes means for adjusting skew of the printhead assembly with respect to an edge of said sheet material means for adjusting skew being disposed within the printhead assembly. It is these limitations found in the

claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art. The primary reason for the allowance of claims 20-22 is the inclusion of method steps for adjusting skew of a printhead assembly that includes adjusting a mechanism for adjusting skew of the printhead assembly with respect to an edge of strip material to ensure proper orientation of the printhead assembly with respect to the edge of the strip material disposed on the worksurface, with the mechanism for adjusting skew being disposed within the printhead assembly. It is these method steps found in the claims, as they are claimed in the combination of, which has not been found, taught or suggested by the prior art of record that makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Isogai (US 5436772) discloses a thermal transfer printing apparatus in which a thermal head having a series of selectively energized heating elements. Kapushinski et al. (US 6,452,620 B1) disclose methods and an apparatus for improved thermal printing.

Communication With The USPTO

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 703-306-4548. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 703-308-4896. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


K. Feggins

January 16, 2004